

CLAIMS:

1 1. A signaling method for use in setting up internet protocol network calls,
2 wherein said internet protocol network comprises an application server for providing call
3 feature processing, said method comprising the steps of:
4 receiving at an application server call information whereby said application server
5 is inserted into a signaling path for said call;
6 determining, at said application server, whether said application server is
7 required in the signaling path to complete call setup for said call; and
8 if said application server is not required in the signaling path to complete said call
9 setup, said application server removing itself from the signaling path.

1 2. The method of claim 1 wherein said step of said application server removing
2 itself from the call signaling path further comprises the step of:
3 transmitting an SIP REDIRECT message to a call control element.

1 3. The method of claim 1 wherein said step of said application server removing
2 itself from the call signaling path further comprises the step of:
3 transmitting an SIP REFER message to a call control element.

1 4. The method of claim 1 wherein, if said determining step determines that said
2 application server is required in said signaling path to complete call setup, said method
3 further comprising the steps of:
4 said application server providing feature processing for said call; and
5 said application server thereafter determining that it is not required in said signal
6 path to complete call setup and removing itself from the call signaling path.

1 5. The method of claim 4 wherein:

2 said step of said application server providing said feature processing further
3 comprises the step of sending an SIP INVITE message to a call control element in order
4 to invoke service of another network server; and

5 said step of said application server removing itself from the call signaling path
6 further comprises the steps of sending to said call control element a) an SIP redirect
7 message or SIP REFER message, and b) an SIP cancel to cancel said INVITE
8 message.

1 6. The method of claim 5 wherein said another network server is a media server
2 and wherein said invoked service is collection of caller input.

1 7. The method of claim 1 wherein said step of removing occurs prior to
2 completion of call setup.

1 8. A signaling method for use in setting up internet protocol network calls,
2 wherein said internet protocol network comprises an application server for providing call
3 feature processing, said method comprising the steps of:

4 receiving at an application server a request for call feature processing for a call
5 whereby said request inserts said application server in a signaling path for call setup;
6 said application server providing said call feature processing; and
7 said application server removing itself from said signaling path upon a
8 determination that it is no longer required in said signaling path for call setup.

1 9. The method of claim 8 wherein said step of removing occurs prior to
2 completion of call setup.

1 10. The method of claim 8 wherein said step of providing said call feature
2 processing further comprises the step of:
3 determining a primary and alternate routing number for said call.

1 11. The method of claim 10 wherein said step of removing occurs immediately
2 subsequent to said determining step.

1 12. The method of claim 8 wherein said step of providing said call feature
2 processing further comprises the steps of:
3 determining a primary routing number for said call;
4 sending said primary routing number to a network element;
5 receiving an indication for an alternate routing number; and
6 determining said alternate routing number.

1 13. The method of claim 12 wherein said step of removing occurs immediately
2 subsequent to said step of determining said alternate routing number.

1 14. A network node for providing call feature processing during setup of internet
2 protocol network calls, said network node comprising of:
3 means for receiving call information;
4 means for determining whether said network node is required in a signaling path
5 to complete call setup for said call; and
6 means for said network node removing itself from the signaling path if is not
7 required in the signaling path to complete said call setup.

1 15. The network node of claim 14 wherein said means for removing further
2 comprises:
3 means for transmitting an SIP redirect message to a call control element.

1 16. The network node of claim 14 wherein means for removing further
2 comprises:
3 means for transmitting an SIP REFER message to a call control element.